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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,227	11/19/2001	Hong Gan	04645.0843	5405

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EXAMINER	
WEINER, LAURA S	

ART UNIT	PAPER NUMBER
1745	3

DATE MAILED: 10/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/992,227	GAN ET AL.	
	Examiner	Art Unit	
	Laura S Weiner	1745	

-- Th MAILING DATE of this communication appears on the cov r sh t with the correspond nc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 October 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-11* is/are rejected.

7)☒ Claim(s) *2* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-11 in Paper No. 4 is acknowledged.

Response to Amendment

2. Examiner acknowledges the cancellation of claims 12-28 cited in Amendment A dated 10-9-03. Claims 1-11 have been examined on their merits.

Claim Rejections - 35 USC § 112

3. Claims 4-5, 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 is rejected because there is no antecedent basis for "wherein with the second electrode active material in a powder form".

Claim 5 is rejected because there is no antecedent basis for "wherein the at least one opening".

Claim 8 is rejected because "the second solvent" should be "a second solvent".

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 6-11 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gan (6,551,747).

Gan teaches in column 14, lines 1-10, that the cathode has the configuration SVO/first current collector/CFx/ second current collector/SVO *[claim 11].* Gan teaches in column 2, lines 45-62, a lithium cell comprising a cathode of SVO/current collector/CFx. Gan teaches in column 14, lines 35-41, the cathode is SVO/Ti current collector / SVO / CFx/ SVO/Ti current collector/SVO. Gan teaches in column 6, line 46 to column 7, line 16, the specified solvent mixture and the claimed salts. Gan teaches in column 6, lines 12-33, that in order to prevent internal short circuit conditions, the sandwiched cathode is separated from the anode by a suitable separator material.

In the event any differences can be shown for the product of the product by process claims 1-11, as opposed to the product taught by Gan, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results. *In re Thrope 227 USPQ 964; (Fed. Cir. 1985).*

With respect to the product by process claims 1-11, the determination of patentability is based upon the product itself not upon the method of its production. *In re Thrope 227 USPQ 964; In re Brown 173 USPQ 685; In re Bridgeford 149 USPQ 55; In re Wertheim 191 USPQ 90.* Any difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the Examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to the Applicants to establish that their product is patentably distinct. *In re Brown 173 USPQ 685 and In re Fessmann 180 USPQ 324.*

7. Claims 1, 6-10 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gan et al. (2002/0090551) or Gan et al. (2002/0098411).

Gan et al. ('551) teaches on page 3, [0024], a sandwich cathode is separated from the Group IA, IIA or IIIB anode by a suitable separator material. Gan et al. teaches on page 3, [0027]-[0028], that when the anode is lithium, the alkali metal salts can be LiPF6, LiBF4, etc. and the claimed solvents are also taught. Gan et al. teaches on page 4, [0030], that the cathode can be CFx/first current collector/SVO/ second current collector/CFx. Gan et al. teaches on page 5, claim 12, that the current collectors can be stainless steel, titanium, etc.

Gan et al. ('411) teaches on page 3, [0025], a sandwich cathode is separated from the Group IA, IIA or IIIB anode by a suitable separator material. Gan et al. teaches on page 3, [0027]-[0028], that when the anode is lithium, the alkali metal salts can be LiPF6, LiBF4, etc. and the claimed solvents are also taught. Gan et al. teaches on page 2, [0012], that the cathode can be MnO2/first current collector/SVO/ second current collector/MnO2 and teaches on page 2, [0014]], that the cathode can be SVO/first current collector/MnO2/ second current collector/SVO. Gan et al. teaches on page 3, [0024], that the current collectors can be stainless steel, titanium, etc.

In the event any differences can be shown for the product of the product by process claims 1-11, as opposed to the product taught by Gan et al., such differences would have been obvious to one of ordinary skill in the art as a routine modification of

the product in the absence of a showing of unexpected results. *In re Thrope 227 USPQ 964; (Fed. Cir. 1985).*

With respect to the product by process claims 1-11, the determination of patentability is based upon the product itself not upon the method of its production. *In re Thrope 227 USPQ 964; In re Brown 173 USPQ 685; In re Bridgeford 149 USPQ 55; In re Wertheim 191 USPQ 90.* Any difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the Examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to the Applicants to establish that their product is patentably distinct. *In re Brown 173 USPQ 685 and In re Fessmann 180 USPQ 324.*

8. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bai et al. (5,744,258).

Bai et al. teaches a hybrid electrode for storage device containing both a high-energy electrode material and a high-rate electrode material. The two materials are deposited on a current collector in superimposed layers, adjacent layers, intermixed with each other or one material coating the other to form a mixture that is then deposited on the current collector. Bai et al. teaches in column 5, line 60 to column 6, line 7, that the electrolyte may be a combination electrolyte/separator which prevents contact between the anode and the cathode or alternatively, an additional separator is needed to keep the two electrodes from shorting together.

In the event any differences can be shown for the product of the product by process claims 1-11, as opposed to the product taught by Bai et al. such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results. *In re Thrope 227 USPQ 964; (Fed. Cir. 1985).*

With respect to the product by process claims 1-11, the determination of patentability is based upon the product itself not upon the method of its production. *In re Thrope 227 USPQ 964; In re Brown 173 USPQ 685; In re Bridgeford 149 USPQ 55; In re Wertheim 191 USPQ 90.* Any difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the Examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to the Applicants to establish that their product is patentably distinct. *In re Brown 173 USPQ 685 and In re Fessmann 180 USPQ 324.*

Allowable Subject Matter

9. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura S Weiner whose telephone number is 703-308-4396. The examiner can normally be reached on M-F (7:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 703-308-2383. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Laura S Weiner
Primary Examiner
Art Unit 1745

October 16, 2003